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ABSTRACT

The State of Florida is actively involved in competency-based teacher education (CBTE). The Career Education Center at Florida State University (FSU) is filling the needs of Florida's vocational educators for competency-based instructional materials. FSU has also participated in the advanced testing of modules developed by the Center for Vocational and Technical Education at Ohio State University, and the Curriculum of Attainments is currently being used at FSU in various programs to award degrees solely on the basis of knowledge or skills. Project ACTIVE (Attaining Competence for Teaching in Vocational Education) is being conducted at FSU for use at preservice/inservice levels to meet the needs of vocational-technical education teachers, leaders in vocational education, and those serving special needs groups. Professional competencies serve as the foundation for the program; related competencies are grouped into broad categories referred to as generic attainments. Assessment is to be carried out in an actual teaching or school-related setting by a three-member jury. The trade and industrial component is the pilot program within Project ACTIVE which is based upon 65 competencies related to eight generic attainments. Selected references are appended. (EA)

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A FLORIDA APPROACH TO COMPETENCY-BASED VOCATIONAL TEACHER EDUCATION

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A FLORIDA APPROACH TO COMPETENCY-BASED VOCATIONAL TEACHER EDUCATION

The purpose of this paper is to focus on the following areas:

- Overview of Competency-Based Teacher Education
- Florida's Commitment to Competency-Based Vocational Education
- Project ACTIVE (Attaining Competence For Teaching In Vocational Education)
- The University-Based Program: Competency-Based Teacher Education at Florida State University

OVERVIEW

The field of Vocational Teacher Education has many new trends and innovations, some of which are more significant than others. Of the more significant trends agreed upon by most experts in the field, we include: (1) certification of vocational teachers--not by completion of courses, but by demonstration of teaching competencies; (2) the emergence of teacher centers; and (3) the increased emphasis on the inservice teacher education. All three of these trends relate directly to the Competency-Based Teacher Education (CBTE) movement.

"Competency-Based Teacher Education" and "Performance-Based Teacher Education" appear quite often in literature today. The terms are used synonymously, but we prefer the term "Competency-Based." The term 'competency-based' not only implies actual performance by the teacher, but it also implies a minimum acceptable level of competence in that performance. The CBTE approach focuses upon the teaching or professional competencies needed by the successful teacher instead of occupational or technical competencies.

Even though definitions vary, there seem to be only three basic characteristics of a truly competency-based program. (1) Such a program identifies competencies important to teachers. By important, we mean those teacher role-related tasks which promote learning by students. After these competencies have been identified, a CBTE program must (2) provide learning activities which focus entirely upon the mastery of these competencies. Finally, (3) assessment of how well these competencies have been attained is accomplished in a real teaching situation.

There is nothing really new about the concept of Competency-Based Education. Vocational teachers have used this approach for years to produce occupationally competent graduates. They have identified skills, used behavioral objectives, learning modules, and other elements associated with competency-based education. The newness is that we are now applying the competency-based approach to the occupation of teaching.

There has been a need for a different approach in preparing vocational teachers because of some basic shortcomings in the traditional course-oriented approach. Competency-based Teacher Education seems to fill these voids:

1. Teacher training program which is built upon the actual professional needs of teachers, rather than unrelated theory and other informational aspects.
2. Instructional program which will meet the individual needs of teachers.
3. Evaluation devices and procedures which focus upon the teachers' performance; that is, what the teacher can do, rather than what the teacher knows.

Some of the advantages of the CBTE approach are evident when it is compared with the traditional approach. The traditional program

is based on content, is group-paced, and is carried out in specific time periods, such as quarters or semesters. The CBTE program is based on each individual's performance of specific competencies when the learner chooses to complete and perform them. The CBTE program is field-based rather than solely in the classroom, and the instructor's role changes to that of a resource person. The CBTE program is also criterion-referenced rather than norm-referenced.

One of the most significant differences between these two approaches is the use of the teacher-educator. The conventional approach utilizes the instructor as a disseminator of information, but in the CBTE approach, the teacher educator's role shifts to that of a learning manager, guide, and resource person. He makes learners aware of the objectives of the program, and then makes various learning experiences available. The instructor and other resource persons also participate in the assessment of the learner's work.

A final major distinction between the two approaches is in the evaluation of learners. Most traditional programs still use the normative-referenced measures, in which students compete against each other; however, the CBTE approach is based on a criterion-referenced mode. Expected levels of competence are identified and made public.

Regarding the assessment aspect of CBTE, there are some pertinent questions. How does one propose to actually evaluate competency attainment? In response, the final assessment is carried out in an actual teaching situation whenever possible. Carrying competencies only to the simulation stage may be better than nothing at all, but

this situation lacks the realism of an actual classroom with real students. The assessment of the teacher trainee's competency uses performance in the classroom as the primary indicator of mastery, rather than what he can recall on a test or exam. It is also important to consider evidence of the student's knowledge which supports the particular competency. This assessment procedure must be as objective as possible.

The next logical question might be: What specific evidence or indicators are used to determine whether a competency has been mastered? Assessment criteria utilized are derived from the competencies themselves. They state conditions under which the teacher must perform and what the expected level of performance is for successful mastery. These criteria are made public in advance along with the competency statements themselves.

Performance in a real teaching role is used as the primary indicator of mastery rather than the student's recall on a test. This assessment procedure strives to be as objective as possible. As an example, let's take the competency, "Present information with an overhead projector." The setting for the assessment would be in an actual classroom and the assessment would be done by a qualified resource person or persons. The resource person would be someone with teaching experience who has a reasonable mastery of using the overhead projector. This resource person might be a teacher-educator, principal, supervisor, or someone similar.

A model of the essential elements of all CBTE programs should include the elements shown in Figure 1.

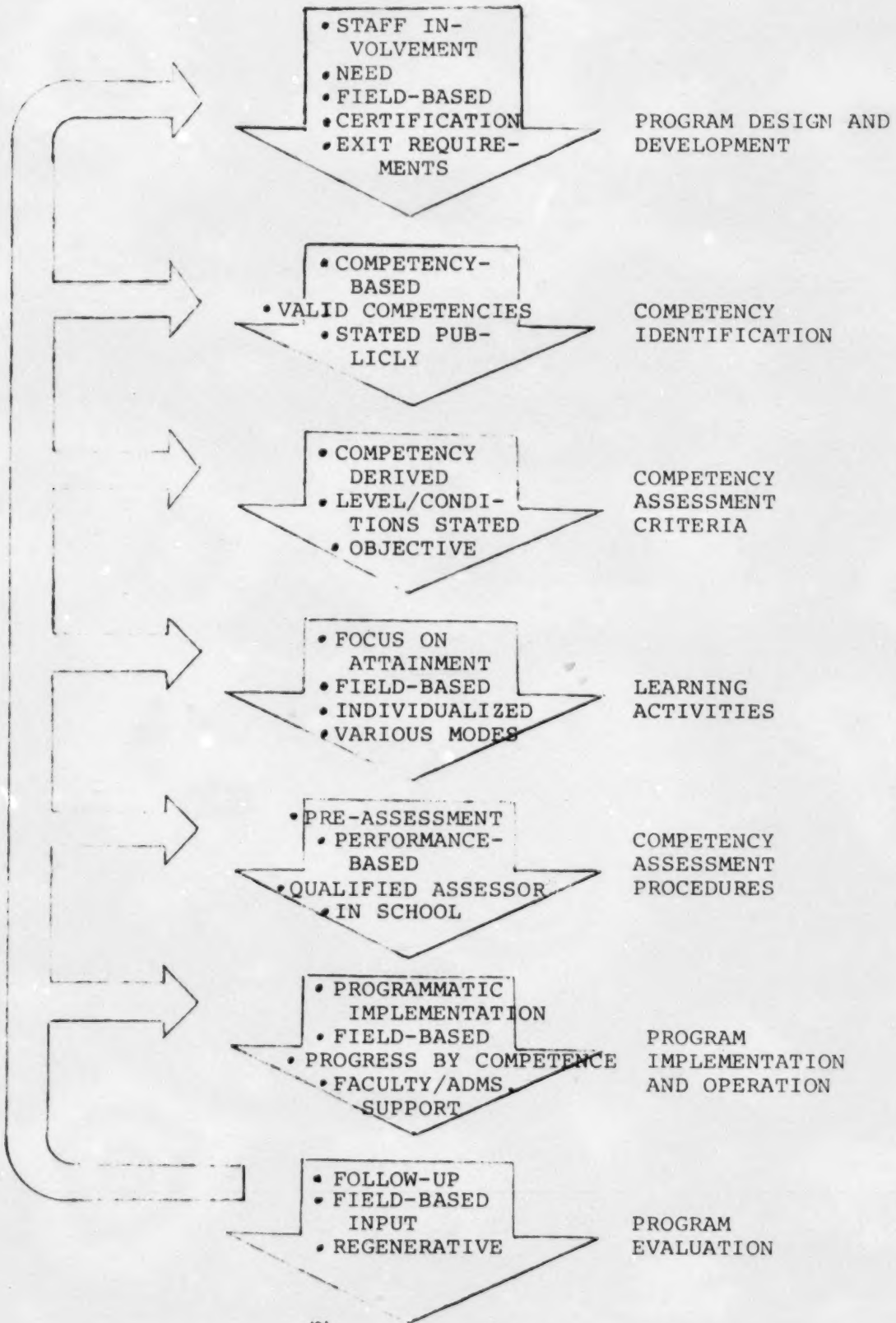
• STAFF IN-VOLVEMENT
• NEED
• FIELD-BASED
• CERTIFICATION
• EXIT REQUIRE-MENTS
PROGRAM DESIGN AND DEVELOPMENT
• COMPETENCY-BASED
• VALID COMPETENCIES
• STATED PUB-LICLY
COMPETENCY IDENTIFICATION
• COMPETENCY DERIVED
• LEVEL/CONDI-TIONS STATED
• OBJECTIVE
COMPETENCY ASSESSMENT CRITERIA
• FOCUS ON ATTAINMENT
• FIELD-BASED
• INDIVIDUALIZED
• VARIOUS MODES
LEARNING ACTIVITIES
• PRE-ASSESSMENT
• PERFORMANCE-BASED
• QUALIFIED ASSESSOR IN SCHOOL
COMPETENCY ASSESSMENT PROCEDURES
• PROGRAMMATIC IMPLEMENTATION
• FIELD-BASED
• PROGRESS BY COMPETENCE
• FACULTY/ADMS. SUPPORT
PROGRAM IMPLEMENTATION AND OPERATION
• FOLLOW-UP
• FIELD-BASED INPUT
• REGENERATIVE
PROGRAM EVALUATION

Figure 1

FLORIDA'S COMMITMENT

The State of Florida is actively involved in Competency-Based Teacher Education. The various vocational service areas in the Division of Vocational-Technical Education of the Florida Department of Education have begun exploring the CBTE concept. Mr. Joe Mills, Director of Vocational Education for the State of Florida, fully supports CBTE, and has stated that "...the Division is committed to move totally into a competency-based approach..."

The Florida Legislature supports CBTE by allowing for both approaches--the Competency-Based approach as well as the traditional one. The Florida Vocational Association (FVA) holds a statewide conference each year. In 1975, the entire FVA conference was devoted to competency-based education at all levels.

The Career Education Center at Florida State University was established three years ago and is supported by the state's Division of Vocational Education. The Center is involved in designing, developing, and diffusion of curriculum materials in high priority areas to fill the needs of Florida's vocational educators for competency-based instructional materials. The Center is also involved in reproducing V-TECS catalogs, using the systems approach in the development of curriculum materials, maintaining the Florida Educator's Information Service, publishing the Florida Vocational Journal, and providing Special Projects services to the Division of Vocational Education.

Florida State University has also participated in the advanced testing of modules developed by the Center for Vocational and Technical Education at The Ohio State University. The testing involved inservice as well as preservice teachers, and has been used in group

instruction along with individual instruction. All vocational subject areas have been involved.

The Curriculum of Attainments (COA) is currently being used at Florida State University. The principal concept of COA is that degrees are awarded solely on the basis of knowledge or skills. These skills or knowledges are demonstrated before faculty juries without regard to the location or the length of time it takes a student to master them. Nine programs in various stages of development at Florida State University, ranging from the planning phase to full development include Marine Biology, Nursing, Urban and Regional Planning, Music, Psychology, Religion, Theater, Recreation and Leisure Studies and Vocational Education.

PROJECT ACTIVE

The Vocational Education Track at Florida State University began developing Project ACTIVE (Attaining Competence for Teaching In Vocational Education) in 1975 in an effort to overcome many of the shortcomings associated with the traditional course-oriented approach to the professional preparation of vocational and technical teachers and related personnel. ACTIVE is funded as an exemplary project by the Vocational and Technical Education Division, Florida State Department of Education. Project ACTIVE has several specific purposes:

1. To identify professional competencies (skills) important to vocational teachers in several service areas as well as various professional support personnel.
2. To identify specific assessment criteria which may be used to determine whether competencies have been attained.
3. To adopt and/or develop performance-based, self-paced learning packages designed to help participants master important competencies.

4. To develop evaluation instruments and strategies that will allow for objective assessment of competency mastery while the participant is performing in an actual school situation.

5. To fully implement this competency-based program in the traditional university setting.

Professional Needs. Project ACTIVE is designed to meet the needs of three groups. These groups include: (1) Vocational-Technical Education Teachers, (2) Leaders In Vocational Education, and (3) Those Serving Special Needs groups. The areas of specialization within the Vocational-Technical Education Teachers group includes Vocational Business Education, Trade and Industrial Education, Industrial Arts, Technical Education, and Cooperative Vocational Education. Administration, Supervision, Research, and Career Education Specialization are specialized areas within the Leaders In Vocational Education group. Areas of specialization within the Those Serving Special Needs group include Handicapped and Disadvantaged. All three of the above groups include preservice and inservice levels. Although still in the developmental phase, many of the objectives of Project ACTIVE have been met. The Trade and Industrial Education component of the project will be implemented during Fall, 1976. Other teaching, leadership and special needs components will be implemented as developmental work continues.

Competencies. This competency-based program is based entirely upon professional competencies validated as important by practitioners in the field of vocational education. For each teaching, leadership, and special needs area within the project, practicing professionals in the field were polled to determine what professional competencies were most important to them on the job. These competencies, then, serve as the foundation for the program. Related competencies are

grouped into broad categories referred to as *Generic Attainments*. The Generic Attainments are included in the university-based section of this paper. Each teaching, leadership, and special needs component within the project may include 8 to 15 Generic Attainments. Each Generic Attainment may include 5 to 20 specific competencies which enable the participant to master Generic Attainments.

Assessment. Attainment of specific competencies will be assessed in an actual teaching or school-related setting. When participants have mastered specific competencies, assessment will be carried out with the participant performing in an actual school setting involving vocational students. This assessment will be done by a qualified resource person using evaluation instruments with specific, objective assessment criteria.

In addition to the assessment of each specific competency by a resource person, participants will be assessed in Generic Attainments (broad competency categories) to determine whether the participant can effectively "fit the pieces together."

This assessment will be carried out by a three-member jury and may include a teacher-educator, master teacher, principal, administrator, supervisor, or other practitioner. The jury will assess the participant's overall mastery of the competencies within each Generic Attainment, based upon products developed by the participant (lesson plans, etc.), results of evaluation of specific competencies by resource person, personal interview with the participant, actual observation of the participant's classroom/laboratory teaching, and other methods. This assessment strategy separates instruction from evaluation.

Grading. The participant will receive a letter grade for each specific competency after assessment by the resource person in an actual school situation. This letter grade is based upon the participant's performance in relation to objective assessment criteria which are made public before assessment takes place. After successful assessment of all specific competencies within a Generic Attainment, the jury will assess the participant's ability to effectively demonstrate the Generic Attainment in a school setting. A letter grade will be assigned for each Generic Attainment. Grades on specific competencies are pooled with the grade received for the Generic Attainment.

Participants can progress at their own rate. Learning packages for each specific competency will be designed to permit self-paced instruction. Participants may complete a learning package at any time during a quarter and progress to another package. Should a student complete all learning packages for a quarter prior to the next quarter's registration, the student may register early for the next quarter and continue on. Incompleted learning packages may carry on to the next quarter without penalty.

Transcript. Student progress will be monitored by the use of a conventional transcript as well as a competency-based transcript. The conventional transcript will list the learning packages and grades received. The competency-based transcript will list each Generic Attainment completed with grade, each juror's signature, and the assessment strategies used for that attainment. Beneath each Generic Attainment will be listed the learning packages, date begun, date completed, grade, and the faculty resource person who helped

the participant with the learning packages. Attached to the transcript will be a one-page narrative about the participant's performance in relation to other participants, along with the jury and resource person's signature.

Resource Person. The resource person will work closely with approximately 15 to 25 participants, and help them through learning packages, assess attainment of specific competencies in an actual school situation, and arrange the jury assessment of each Generic Attainment. The resource person sits in on the jury assessment only to answer questions, etc. This system promotes a very close relationship between participant and resource person.

Degree & Certification. Participants may or may not be seeking a degree. Those seeking a degree must complete all vocational education learning packages, all university degree requirements and receive a satisfactory grade from the jury assessment on all Generic Attainments. If the participant is seeking vocational-technical certification only, the core of professional vocational education learning packages are completed, as well as jury assessment of Generic Attainments. The State Department of Education, Certification Section, has been actively involved in the conceptualization and planning of Project ACTIVE, and has agreed to certify participants completing Project ACTIVE based upon completion of the program rather than by evaluation of specific courses.

THE TRADE & INDUSTRIAL EDUCATION COMPONENT OF PROJECT ACTIVE

The Trade and Industrial Education Component is the pilot program within Project ACTIVE. This pilot will be used as an example because it is further along than any of the other programs.

Rationale. In Florida, Trade and Industrial (T & I) teachers are primarily recruited from industry without prior teacher education. These teachers are required to enroll in professional education courses to attain teacher certification while teaching. In many cases the T & I teacher enroll in whatever college courses are offered in their geographical areas, regardless of the teacher's immediate needs.

For example, a beginning T & I teacher may have a need for help with lesson planning or other survival skills, but only a graduate level course in administration of vocational education is available in his geographical area. This condition may be a cause of frustration and also be a contributing factor to the high turnover rate among new teachers. Therefore, there is a need for a program which will allow teachers more flexibility in terms of acquiring basic teaching skills. A CBTE program is being explored as an answer to this problem.

Procedure. Although Florida State University was the coordinating institution in this industrial education competency-based project, it was a total statewide effort. A state advisory committee was established that included state department personnel, teacher educators, industrial teachers, supervisors, and administrators. All the state's universities which are approved to offer teacher education programs in trade and industrial education were involved. These were:

Florida State University, Florida Agricultural and Mechanical University, Florida Technological University, Florida International University, The University of North Florida, The University of South Florida, and The University of West Florida. Dade County and Pinellas County schools were also involved.

The first phase of the project, which was completed in 1975, identified competencies, along with specific assessment content. The project also reviewed many CBTE curricular materials available throughout the state and nation, and identified those materials suitable for Florida's industrial education teachers.

Presently, during the second phase, the state advisory committee is focusing on funding alternatives for CBTE, competency-based preservice education, competency-based inservice education and university-level CBTE. These sub-activities are being performed through four regional committees which are strategically located. To fulfill regional responsibilities, each regional committee team plans, organizes, monitors,and reports regional activities at the regularly scheduled monthly statewide advisory committee meetings. The cooperating universities and local county representatives for the regional committees include:

Funding Alternative Regional Committee
Dade County and Florida International University located in south Florida

Preservice Program Regional Committee
University of South Florida, Florida Technological University and Pinellas County located in central Florida

Inservice Program Regional Committee
University of North Florida, University of West Florida and Florida A & M University located in northern Florida

University-Based CBTE Regional Committee
Florida State University located in northern Florida

Pilot Program. The University-Based CBTE Program in T & I Education at Florida State University is the pilot program within Project ACTIVE. This pilot program is based upon sixty-five competencies which were developed during the first phase. Except for the Orientation attainment, mastery of all competencies will be assessed in a real teaching situation. The generic attainments for this program are:

A. Orientation to Vocational Teaching - designed to give the instructor a brief overview of vocational teaching. (8 competencies)

B. Preparation for Instruction - principles and techniques of planning and organizing instructional materials and preparing and motivating students to learn. (8 competencies)

C. Presentation of Instruction - principles and techniques for helping students master instructional objectives. (16 compts.)

D. Application of Learning - principles and techniques for helping students apply what they have learned. (6 competencies)

E. Evaluation - principles and techniques for evaluating students' mastery of instructional objectives. (6 competencies)

F. Classroom/Laboratory Management - principles and techniques of managing time, materials, equipment, supplies, etc. for safe and effective mastery of instructional objectives. (8 compts.)

G. Human Relations - principles and techniques for effectively communicating with students, parents, colleagues, administration, community and others with whom the instructor must deal. (10 competencies)

H. Professional Role - designed to help the teacher develop a professional philosophy and the skills needed to increase professional and occupational competencies. (3 competencies)

Issues. The University-Based CBTE Regional Committee has been addressing issues for implementing the CBTE approach into the university setting. These issues include:

. Providing for open-entry, open-exit registration

. Developing a competency-based transcript

- Assigning grades and credit to competencies
- Sequencing students through the learning activities
- Awarding credit for competencies previously attained
- Managing and maintaining information systems
- Providing for the transition of the students' role to the competency-based approach
- Providing for the transition of the teacher educators' role to the CBTE approach

SUMMARY

Florida is totally committed to the Competency-based approach in education, but to fully implement this non-traditional approach many barriers will have to be overcome. Among these barriers are the use of needless and non-relevant entrance requirements for entry into the program. The course-oriented and instructor-centered approach will have to be abandoned for a performance and field-based approach. Many different learning activities will need to be included other than the present traditional classroom instruction. These barriers and many more will take time to overcome. The time to start is now.

The CBTE program has caught on surprisingly fast across the nation. More than 30 states have reported major involvement through either legislative/administrative support for CBTE, or through studying the concept seriously. Reportedly, approximately 100 teacher education institutions are using a total CBTE program or an alternate program. At least 20 national consortia, institutes, centers or other groups have a primary or major function in the promotion of the CBTE movement. Many articles, position papers, and monographs dealing specifically with CBTE appear monthly. The national involvement regarding CBTE

has been positive, but whether it will survive will depend upon how successfully the barriers are overcome. Survival will also depend upon a positive approach to implementing the CBTE concept now and making it work.

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